

Diluvial ancestor of the African fennec (*Fennecus*, Gray) may come under consideration.

That our existing wild Canidæ (wolf, jaekal, and fox) may in the lapse of time have been employed in crossing with true dogs, and thus might have contributed to the formation of race-forms (*e. g.* perhaps the sheepdog and wolfdog), I will not at present dispute; but the question whether and how far this may be the case, as well as the question how far still living forms referred to the groups of the wolf or the fox (such as *Lupus pallipes*, Gray, and *Lupus japonicus*, Nehring, and other wild Canidæ of Asia and Africa) approach or correspond with the remains of our Diluvial true dogs, and, further, the question whether and how far the forms of *Cuon*, Gray, occurring with us in the Diluvium, and which, by the peculiar texture of their teeth approach rather to the true dogs than to the wolves, may have taken part in the formation of the races of our domestic dogs, will have to be shown by further detailed investigations.

This, however, appears to me to be certain, that the ancestors of our European races of domestic dogs no longer exist (in Europe). At the same time I regard it as very probable that the so-called *feral* dogs of Syria are not "feral" domestic dogs at all, but the remnant of a Diluvial true wild dog, to be brought into union with *Canis familiaris palustris* and *ladogensis*. Whether this is the case also with the "feral" dogs of Africa I cannot at present assert.—*Anzeiger k.-k. Akad. Wiss. Wien*, January 21, 1886, pp. 12-16.

Pelagic Animals from Freshwater Basins in Alsace-Lorraine.

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I took the opportunity of my presence at the fifty-eighth meeting of German naturalists and physicians at Strasburg to make an excursion on 23rd September last for the investigation of the microscopic fauna of the so-called "Weiher" between Saarbùrg and Dienze, in the north-west part of Alsace-Lorraine. There are here a number of larger and smaller accumulations of fresh water, which, with the exception of two, namely the Mittersheimer- and Gunderchingen-Weiher (both the property of the State), are periodically for some years laid dry and cultivated over almost their whole extent. The largest of them may be the Linden-Weiher, near Dienze, the bottom of which is at present under cultivation. Some of these reservoirs of water are of considerable extent; thus the above-mentioned Mittersheimer-Weiher measures about $4\frac{1}{2}$ kilometres in length.

On the 23rd September, by means of the pelagic net, I collected material in three of these pools, namely the Mittersheimer-, Niederstein-, and Zemmingen-Weiher. In the last I had a boat at my command, while in the former two freshwater basins I attained my object by throwing out the net from the sluice, where in general the deepest part occurs.

The Protozoa, Rotatoria, and Entomostraca found in these basins are as follows:—

I. Mittersheimer-Weiher (229 metres above sea-level).

- Protozoa: *Dinobryon divergens*, Imh.
Peridinium, sp.
Ceratium hirundinella, O. F. Müller*.
Codonella, sp.†
- Rotatoria: *Synchaeta pectinata*, Ehr.
Polyarthra platyptera, Ehr.
Anuræa cochlearis, Gosse.
 — *longispina*, Kellicott.
 — *aculeata*, Ehr., var. *regalis*, Imh.
- Cladocera: *Daphnella brachyura*, Liévin.
Daphnia kahlbergensis, Schödler.
Bosmina, sp.
Leptodora hyalina, Lilljeb.
- Copepoda: *Cyclops*, sp.
Diaptomus, sp.

II. Niederstein-Weiher (1 kilometre long, 231 metres above sea-level).

- Protozoa: *Volvox minor*, Stein.
- Rotatoria: *Triarthra longiseta*, Ehr.
Anuræa cochlearis, Gosse.
 — *aculeata*, Ehr., var. *regalis*, Imh.
Asplanchna, sp.
- Cladocera: *Daphnella brachyura*, Liévin.
Daphnia, sp., ♂ and ♀.
- Copepoda: *Diaptomus*, sp.
- Insecta: *Corethra*-larvæ.

III. Zemminger-Weiher (1.7 kilometre long, 215 metres above sea-level).

- Protozoa: *Volvox minor*, Stein.
Codonella, sp.
- Rotatoria: *Synchaeta pectinata*, Ehr.
Triarthra longiseta, Ehr.
Polyarthra platyptera, Ehr.
Anuræa cochlearis, Gosse.
 — *aculeata*, Ehr., var. *regalis*, Imh.
Pterodina patina, Ehr.
Brachionus Bakeri, Ehr.

* For the present I cite under this name all the *Ceratia* nearly approaching Müller's form, of which it may be thought that they are mere varieties.

† *C. lacustris*, Entz. (Zur näheren Kenntniss der Tintinnoden, 1885).

- Cladocera : *Daphnella brachyura*, Liévin.
Daphnia mucronata, O. F. Müll.
 —, sp.
- Copepoda : *Cyclops*, sp.
Diaptomus, sp.

Besides the above-named seven species of Rotatoria the examination of the material from this last basin furnished two other species, which, however, I am unable to identify with known forms. One of them is a *Brachionus* which stands between *Bakeri* and *polyacanthus*, Ehr. On the anterior dorsal margin the carapace bears four spines, as in *polyacanthus*; but of these the two intermediate ones spring from a broad base, narrow rapidly into a long uniformly thin process, and are separated from each other by a deep and broad emargination, at least as far as from the shorter lateral spines, which are little more than half their length. On the ventral surface we find no teeth at this part, but in the middle there is a small notch. The place of issue of the foot is furnished with two laterally-placed, pointed, jagged teeth. The general form of the body as compared with the two above-mentioned species is more elongated and only a very little inflated at the sides. Length of the body without the spines 0.336 millim.; greatest breadth 0.240 millim. This species may be denominated *Brachionus lotharingius*.

The body of the second species has a cylindrical form, straightly truncated in front, without processes posteriorly, from the termination of the second third (after a previous slight inflation) running out to a point, and passing into two spines of unequal development which originate close together. The right spine is considerably stouter and also rather longer than the left one, which, however, attains the length of the body. At the anterior extremity of the body dorsally two long thin spines, directed backwards at the sides of the body, are attached. Their basal parts are in contact in the middle line of the back. In these also we find an unequal development, inasmuch as, of these appendages, the right one is longer than the left and at the same time rather stouter. In the preserved specimens I could not with certainty recognize any special musculature for moving this stalkless fork; but it may function as a locomotive apparatus, as I have met with it in different individuals standing off at different distances from the body, from which we may conclude that it has a certain mobility. This organization would approximate the present wheel-animalcule to the genera *Triarthra* and *Polyarthra*; but I must leave it to a fresh examination of living specimens to decide its reference to any genus. In the definition of the species the unsymmetrical development of the spines may be of value.—*Zoologischer Anzeiger*, No. 211, December 14, 1885, pp. 720-723.